

## **REMARKS**

Entry of the foregoing and reconsideration of the subject application are respectfully requested in light of the amendments above and the comments which follow.

Claims 1-2, 4-14, 16-17 and 19-29 were pending. By the present response, claim 1 has been amended to correct a typographical error and claim 2 has been canceled. Thus, upon entry of the present response, claims 1, 4-14, 16-17 and 19-29 remain pending and await further consideration on the merits.

Support for the foregoing amendments can be found, for example, in at least the following locations in the original disclosure: the original claims.

## ***ALLOWABLE SUBJECT MATTER***

Applicants note with appreciation the indication that claims 6-10 and 20-24 would be allowable if rewritten in independent form, including all the limitations of the base claim and any intervening claims, as noted in paragraph 8 of the Official Action.

## ***CLAIM OBJECTIONS***

Claim 2 is objected to because of the noted informalities. Claim 2 has been canceled. Reconsideration and withdrawal of the objection is respectfully requested.

## ***CLAIM REJECTIONS UNDER 35 U.S.C. §102/§103***

Claims 1-2, 4-5, 11-14, 16-17, 19 and 25-29 stand rejected under 35 U.S.C. §102(b) as being anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over EP 0 902 103 A1 to Nippon Steel Corporation (hereafter "*EP '103*") on

the grounds set forth in paragraph 7 of the Official Action. For at least the reasons noted below, this rejection should be withdrawn.

The present claims are directed to a sol, in other words fine particles of colloidal dimension in stable dispersion in a liquid phase, stable meaning that no precipitation or decantation occurs. As noted, for example, in claims 5, 17 and 28, colloidal dimensions include sizes of at most 200 nm (see the two last paragraphs of page 3 of the English translation of the specification).

*EP '103* discloses a surface treatment agent based on lanthanum phosphate and on other rare earth salts such as cerium acetate. This agent is obtained by reacting lanthanum oxide with phosphoric acid and by mixing the different other components of the agent (see, for example, Examples 1-6 and samples 1-8, 27-34, 53-60 and 79-86 of Tables 1-4).

First, there is no teaching in *EP '103* of the way to obtain a sol according to the present claims. For example and as noted above, the method disclosed in *EP '103* involves phosphoric acid. The Official Action also cites to phosphoric acid as being disclosed in *EP '103* (see first paragraph of page 4). However, the independent claims recite both that the acid is "an acid other than phosphoric acid" and that the "acid is selected from the group consisting of acetic acid, formic acid, citric acid and propionic acid" (claim 1, 14 and 29). Therefore, the reference does not disclosure all of the features of the present claim and an anticipatory rejection is improper. In regards to an obviousness rejection, the Official Action does not even address this difference between the claims and therefore a proper prima facie case of obviousness has not been established. For at least these reasons, the rejections should be withdrawn.

Applicant does note paragraph [0048] of *EP '103*, where it is stated that the surface treatment agent may "... exhibit a hard paste form, a soft paste form, a colloid form or a solution form." However, this does not necessarily lead to the sol and methods of the present claims and therefore the claimed features cannot be considered as inherent in the reference.

Indeed, when considered as a whole, *EP '103* would not have lead one of ordinary skill to form a sol. For example, the examples in *EP '103* concern solid products (paste-like products) or solutions (see example 1, p. 9, l. 49 and 53, Example 5, p. 15, l. 5, Example 6, p. 15, l. 15, Example 9, p. 33, l. 20 wherein water is added as a diluting agent to the composition) and do not disclose, teach or suggest a sol and methods as present claimed.

Because the reference does not explicitly include all of the features of the claims, it cannot anticipate the claims. Also, because the features absent from the disclosure are not inherent in *EP '103*, the reference does not teach or suggest all of the features of the claims and a prima facie case of obviousness has not been established. For at least the above noted reason, the rejection should be withdrawn.

Second, the Examiner's objection concerning the size of the particles in the second paragraph of page 4 of the Official Action is respectfully traversed as not being based on the disclosure in *EP '103*. The Examiner refers to the thickness of the film made out of the treatment agent and applied on the metallic substrate to support conclusions as to the size of particles. Examples describe obtaining this film after a drying step at generally (see examples) a temperature between 100-200°C up to one hour. One cannot infer, as it appears the Examiner has, from the thickness of

the film any information concerning the size of the particles of the treatment agent when it is used. For example, the particles may be oriented with a major dimension in the plane of the film and have dimensions (as a result of a high aspect ratio) much larger than those alleged by the Examiner and much larger than those claimed.

Furthermore, even if it was possible to infer any particle size, this does not mean that the treatment agent would be in the form of a sol that is, again, a stable dispersion.

For at least these further reasons, neither anticipation nor obviousness has been established as all of the elements are not present or suggested by the cited reference. Reconsideration and withdrawal of the rejections are respectfully requested.

Lastly, the objection raised at the second paragraph of page 5 of the Official Action is also respectfully traversed. From a technical point of view, it is not possible to obtain sols by mere dilution of a starting product such as a solid dispersion. This is due to the complexity of the chemistry of the sols. Indeed, the stability of the particles in the liquid phase depends on several chemical and electromechanical parameters. It is respectfully asserted that these parameters are not disclosed taught or suggested in *EP '103* and therefore, at best, one is left with an "obvious to try" analysis to support the claims. Such an "obvious to try" rationale is not sufficient to maintain the rejection as the elements of a prima facie case of obviousness have not been established. Accordingly, reconsideration and withdrawal of the rejections are respectfully requested

**CONCLUSION**

From the foregoing, further and favorable action in the form of a Notice of Allowance is earnestly solicited. Should the Examiner feel that any issues remain, it is requested that the undersigned be contacted so that any such issues may be adequately addressed and prosecution of the instant application expedited.

Respectfully submitted,

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